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ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR CONFIRMATION NO. 01/22/2004 BHT-3167-175 2688 10/761,332 Chiao Chung Huang **EXAMINER** 01/31/2006 7590 BRUCE H. TROXELL **EDWARDS, LAURA ESTELLE SUITE 1404** ART UNIT PAPER NUMBER 5205 LEESBURG PIKE FALLS CHURCH, VA 22041 1734

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
Office Action Summary	10/761,332	HUANG, CHIAO CHUNG
	Examiner	Art Unit
	Laura Edwards	1734
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on 21 November 2005.		
2a)⊠ This action is FINAL . 2b)□ This action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>8.9 and 11-14</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>8, 9, and 11-14</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examine	r.	
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
Notice of References Cited (PTO-892)	4) Interview Summary	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ite atent Application (PTO-152)
Paper No(s)/Mail Date	6) Other:	,

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Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 8, 9, and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over ASPA (the Admitted State of the Prior Art) in view of Kido et al (JP2003-149645).

The ASPA, as set forth in the instant specification on pages 1-4 and in Figs. 1-4, teaches or suggests a rubbing apparatus for LCD comprising the combination of a carrier plate bearing a glass substrate having an on top alignment film thereon, the substrate including a visible region and an invisible region, the alignment film having a thickness of 500 angstroms to 1000 angstroms; a conveying device for transporting the carrier plate having the substrate thereon, and a rubbing roller rotating in a clockwise direction at an in-stream direction the same as the predetermined direction of the alignment film of the substrate, the rubbing roller having a cloth thereon to rub the alignment film. The ASPA does not teach or suggest the rubbing roller rotating in a counterclockwise or inverse direction on the alignment film on the substrate. However, it was known in the art, at the time the invention was made, to provide a rubbing roller rotating in a counterclockwise or inverse direction on the alignment film as evidenced by Kido et al (see abstract, Fig. 2). It would have been obvious to one of ordinary skill in the art, to provide an inverse rubbing roller as taught by Kido et al in the apparatus of the ASPA in place of the clockwise rotating rubbing roller as an alternative rubbing apparatus for alignment of the crystals on the substrate. It is within the purview of one skilled in the art seeking to align the crystals on the substrate during the manufacture of a liquid crystal display device to utilize either a clockwise or counterclockwise rotating rubbing roller and therefore, patentability does not result.

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With respect to claim 9, the ASPA recognizes that the alignment film can include a

polyamic acid or polyamide (see instant specification, page 2, line 14-18).

With respect to claims 11 and 12, the ASPA recognizes that the glass substrate and the inversed roller can form a predetermined angle (see instant specification, page 3, lines 8-10.

With respect to claim 13, the ASPA recognizes that in the visible region or central area of the glass substrate, there are film transistors or transparent electrodes (see instant specification, page 2, lines 18-22).

With respect to claim 14, see the ASPA (instant specification, page 2, lines 16-18).

Response to Arguments

Applicant's arguments filed 11/21/05 have been fully considered but they are not persuasive.

Applicant contends that the ASPA and Kido et al do not teach or suggest the alignment film having a thickness of 500 to 1000 angstroms. This argument is not deemed persuasive because the ASPA explicitly teaches an alignment film having a thickness of 500 to 1000 angstroms in the instant specification on page 2, lines 14-15.

Applicant contends that under case law including, <u>In re Rothermel and Waddell</u> and <u>Orthopedic Equipment Company Inc. v. United States</u>, it is improper to base an obviousness rejection using piecemeal reconstruction of Applicant's disclosure even if Applicant's disclosure provides selective teachings to that which is known and conventional in the prior art. This argument is well taken, however, the basis of the obviousness rejection as applied above is not solely dependent upon Applicant's disclosure, pages 1-4 and in Figs. 1-4. While a substantial

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wealth of information pertaining to the conventional wisdom of the routineer in the art with respect to alignment of films in the manufacture of liquid crystal displays has been provided by Applicant in the instant disclosure, pages 1-4 and Figs. 1-4, it appeared that Applicant sought patentability based on the usage of an inversed roller for film alignment. Kido et al clearly provide evidence that it is well known and conventional to use an inversed roller for film alignment (see abstract, Fig. 2). Therefore, a prima facie case of obviousness has been established in light of the ASPA in view of Kido et al such that patentability does not result of the claimed invention.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Edwards whose telephone number is (571) 272-1227. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on (571) 272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura Edwards Primary Examiner Art Unit 1734

Le January 28, 2006